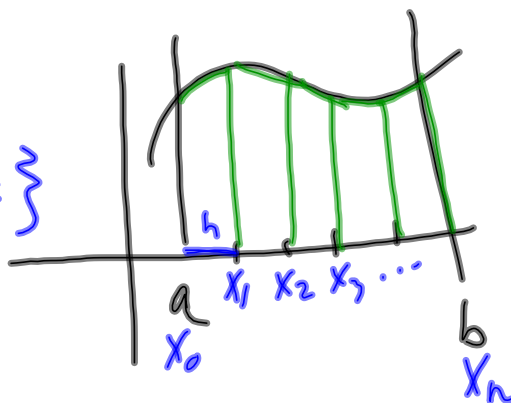


review 23      Trap Rule

$$T = \frac{h}{2} \left[ y_0 + 2y_1 + \dots + 2y_{n-1} + y_n \right]$$

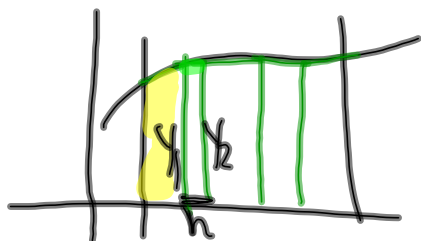
$$h = \frac{b-a}{n}$$

{all h's are =}



Apr 16-8:29 AM

unequal h's



do 1 trap at a time  
 $\frac{1}{2}(y_1 + y_2) \cdot h_i$

Apr 16-9:21 AM

$$\text{Trap} = \frac{\text{L RAM} + \text{R RAM}}{2}$$

Apr 16-9:24 AM

p211 #2

~~p212~~

remote control toy car

115

$$a = 0$$

$$b = 10$$

$$n = 10$$

$$h = \frac{10 - 0}{10} = 1$$

Apr 16-9:24 AM

use the Trap. rule to approx.

the ave value of  $f(x) = x^2$

on  $[0, 2]$  use  $h = .5$

$$\frac{1}{2} (0 + 2(.5)^2 + 2(1^2) + 2(1.5)^2 + 2^2)$$

→ 2.75

$$\bar{y} = \frac{1}{2-0} \int_0^2 x^2 dx$$

$$\frac{2.75}{2} = 1.375$$

Apr 16-9:34 AM